

REMARKS

Applicants request favorable reconsideration and allowance of the subject application in view of the preceding amendments and the following remarks.

To place the application in better form, Applicants submit herewith a substitute specification, which includes a new abstract. For the Examiner's convenience, also provided is a marked-up copy of the original specification showing the portions thereof which are being changed. The substitute specification includes the same changes as are indicated in the marked-up copy. Applicants' undersigned attorney has reviewed the substitute specification and submits that the substitute specification contains no new matter.

Claims 9-11 are presented for consideration in lieu of claims 1-8, which have been canceled without prejudice or disclaimer. Claim 9 is the sole independent claim. Support for these claims can be found in the original application, as filed. For example, the Examiner's attention is directed to FIG. 1, FIG. 2A, FIG. 2B, and FIG. 3, as well as the discussion in the subject specification on page 12, line 20, to page 15, line 11. Accordingly, no new matter has been added.

Applicants request favorable reconsideration and withdrawal of the rejections set forth in the above-noted Office Action.

Claims 6 and 7 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,334,466 to Yasui et al. Claims 1-5 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Yasui et al. patent in view of U.S. Patent No. 6,171,730 to Kuroda et al. and U.S. Patent No. 6,252,649 to Sangu. Applicants submit that the cited art, whether taken individually or in combination, does not teach or suggest many features of the present invention,

as previously recited in these claims. Therefore, these rejections are respectfully traversed.

Nevertheless, Applicants submit that independent claim 9, for example, as presented, amplifies the distinctions between the present invention and the cited art.

Independent claim 9 recites a near-field exposure method that includes preparing a photomask for near-field exposure, having a light blocking film provided on a base material constituting a membrane portion and a support member supporting the base material, wherein a first alignment mark for rough alignment is provided on the support member and a second alignment mark for fine alignment is provided on the membrane portion, setting the photomask and an object to be exposed in a near-field exposure apparatus, aligning the photomask and the object using the first alignment mark, flexing the membrane portion to contact with the object and detecting a positional relation between the membrane portion and the object using the second alignment mark, aligning the photomask and the object based on the detected positional relation and flexing the membrane portion to contact with the object, and exposing the object to light from a light source by way of the photomask.

Applicants submits that the cited art does not teach or suggest such features of Applicants' present invention, as recited in independent claim 9.

The Sangu patent has been discussed in the Background section of the subject specification. In the apparatus discussed in the Sangu patent, a pressure film and a film-mask are separate. In turn, if a foreign particle, such as dust, enters between them, precise exposure is easily obstructed.

The present invention, on the other hand, assures accurate alignment, in addition to avoiding the inconveniences described above with respect to the arrangement in the Sangu patent.

In the present invention, as recited in independent claim 9, the photomask is provided with the first alignment mark for rough alignment and a second alignment mark for fine alignment. In addition, independent claim 9 recites preparing a photomask for near-field exposure having a light blocking film provided on a base material constituting a membrane portion and a support member supporting the base material. Thus, in the present invention, the membrane portion is comprised of an integral structure of the light blocking film and the base material. In the present invention, therefore, foreign particles, such as dust, are not able to enter a pressure film and film-mask, as is the case in the device in the Sangu patent.

Still further, the present invention uses two types of alignment marks, that is, a first alignment mark for performing rough alignment and a second alignment mark for performing fine alignment. This enables a reduction in time for accomplishing the alignment, while ensuring accurate alignment. These features, as well, are not taught by the Sangu patent.

The Examiner also cites the Yasui et al. patent, which shows an X-ray mask having an alignment mark. Applicants submit, however, that this patent is not at all related to near-field exposure, in the manner of the present invention recited in independent claim 9. Still further, the Yasui et al. patent teaches nothing regarding use of two types of alignment marks, in the manner of the present invention.

The Kuroda et al. patent shows near-field exposure in which exposure is carried out while flexing a photomask by elastic deformation so that it contacts a resist. Applicants submit, however, that this patent is completely silent as to performing an alignment process for the photomask and the resist, in the manner of the present invention, as recited in independent claim 9.

For the reasons noted above, Applicants submit that the cited art, whether taken individually or in combination, does not teach or suggest many features of Applicants' present invention, as recited in independent claim 9.

For the foregoing reasons, Applicants submit that the present invention, as recited in independent claim 9, is patentably defined over the cited art, whether that art is taken individually or in combination.

Dependent claims 10 and 11 also should be deemed allowable, in their own right, for defining other patentable features of the present invention in addition to those recited in independent claim 9. Further individual consideration of these dependent claims is requested.

Applicants submit that the instant application is in condition for allowance. Applicants request favorable reconsideration, withdrawal of the rejections set forth in the above-noted Office Action and an early Notice of Allowance.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our address listed below.

Respectfully submitted,



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